

Central Marin Sanitation Agency  
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## **ELECTRICAL/ INSTRUMENTATION SUPERVISOR**

### **SUMMARY**

Under general direction of the Treatment Plant Manager, plans, schedules, supervises and allocates work to subordinates; oversees, installs, maintains and repairs the Agency's electrical, instrumentation, process control system, and information systems, and networks; performs preventative maintenance, repairs, adjustments, overhauls, replacements and new installations of a variety of electrical, instrumentation, computers, PLCs, pneumatic, hydraulic, heating, air conditioning and electro-mechanical systems.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES**

Essential duties include the following. Other duties may be assigned.

- Plans, prioritizes, assigns, supervises and reviews maintenance activities, and the work of staff maintaining and repairing electrical, instrumentation and other equipment found in a wastewater treatment plant and related facilities.
- Analyzes Agency hardware and software needs for process information and control, business, communications and administrative applications; develops specifications, communicates with vendor and manufacturer representatives and recommends purchase, modifications and upgrades.
- Participates in short and long-term O&M capital planning and the annual budget process for electrical, instrumentation, and information system hardware and software.
- Responds to work orders, troubleshoots complex equipment problems, plans and estimates time, equipment and materials required to effect repairs.
- Configures and installs new and upgraded system hardware and software; tests modules, databases and other system modifications to ensure operational effectiveness; trains staff in the use of new and modified hardware and software.
- Monitors, troubleshoots and maintains Agency file servers, computers, networks, work stations and peripheral equipment; makes repairs and/or contacts vendor representatives for contract maintenance and repair services.
- Coordinates and integrates intra-departmental and inter-agency information systems projects; acts as the Agency representative with other agencies regarding email server, data and alarm transmission, information systems projects and programs.
- Installs and maintains security systems including plant cameras, entry gates and hardware and software for the process control and information systems.
- Maintains power systems including cogeneration tuning and controls, emergency generator transfer controls and switchgear, and various battery backup systems.
- Attends, leads and participates in meetings, training and safety sessions and on Teams and subcommittees as required.
- Trains and instructs employees in safety procedures to be followed while working with and around, electrical devices.
- Develops system documentation as required and maintains CMMS documentation of work completed and inventory.
- Installs, monitors, tests, calibrates, troubleshoots, maintains and repairs a variety of electrical, electronic, pneumatic, hydraulic, heating, air conditioning, control equipment, and electro-mechanical systems.

- Reads and interprets specifications, diagrams, manuals and other documentation for troubleshooting and for design comments. .
- Manages radio systems for communication and data, including licensing, equipment installation and maintenance.
- Maintains and provides updates for the Agency web page.
- Preparing clear, accurate and effective correspondence, reports, documentation, specifications, procedures and other written materials.
- Establishing and maintaining effective working relationships with those contacted in the course of the work.
- Performs the duties of the Treatment Plant Manager on a relief or as-assigned basis.

### **SUPERVISORY RESPONSIBILITIES**

Directly supervises up to four E/I technicians. Carries out supervisory responsibilities in accordance with agency guidelines, policies, and applicable labor, regulatory and safety laws. Responsibilities include interviewing, hiring recommendations, and training employees; planning, assigning, staffing coverage, and directing work; tracking and authorizing time sheets; setting staff work expectations, performance goals, and work plans; appraising performance; rewarding and disciplining employees; investigating, addressing and resolving personnel complaints and related problems.

### **QUALIFICATIONS**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

### **EDUCATION AND/OR EXPERIENCE**

Equivalent to completion of an associate of arts degree with major course work in computer science, process technology, electronics or a field related to the work. Additional experience as outlined below may be substituted for the education on a year-for-year basis. Three years of technical experience in installing, maintaining and upgrading electrical equipment, instrumentation, process control systems, computer systems, networks and system administration.

### **INTERPERSONAL SKILLS**

Ability to interact with others (co-workers, supervisors, subordinates, vendors, members of the public) in a professional manner; ability to accept constructive criticism from supervisors, peers, and subordinate employees; to recognize the need for, and to seek, assistance or clarification as needed; to work independently; to handle work-related stress in a professional manner; to prioritize assignments and meet deadlines; to prevent personal problems from adversely impacting work for self or others; to arrive at work as scheduled and to work the hours as agreed upon and scheduled.

### **LANGUAGE SKILLS**

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from staff, other departments' managers & staff, customers, and the general public.

### **MATHEMATICAL SKILLS**

Ability to apply advanced mathematical concepts such as exponents, logarithms, quadratic equations, and permutations. Ability to apply mathematical operations to such tasks as frequency distribution, determination of test reliability and validity, analysis of variance, correlation techniques, sampling theory, and factor analysis.

**REASONING ABILITY**

Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables. Ability to recognize, mitigate and correct unusual, inefficient or dangerous operating conditions.

**CERTIFICATES, LICENSES, REGISTRATIONS**

Desirable to possess Electrical/Instrumentation Grade IV certification issued by the California Water Environment Association (CWEA). Must possess a valid California Class C driver's license, have a satisfactory driving record and continue to meet CSRMA driving standards. Failure to maintain this standard may result in loss of employment.

**PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel and talk or hear in person or on the telephone or radio. The employee frequently is required to stand, walk, sit, reach with hands and arms, and smell. The employee is occasionally required to climb or balance and stoop, kneel, crouch, or crawl. The employee must be able to lift and/or move up to 25 pounds to shoulder height, up 50 pounds to waist height, and up to 100 pounds up to 9" off the ground (such as for a manhole cover). Specific vision ability required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

**WORK ENVIRONMENT**

The work environment characteristics described here are representative of those that an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee is frequently exposed to risk of electric shock; moving mechanical parts; fumes or airborne particles; to wet and/or humid conditions; and outdoor weather conditions. The employee is occasionally exposed high, precarious places; toxic or caustic chemicals; construction project site conditions; extreme heat; and vibration. The noise level in the work environment is usually moderate with occasional exposure to loud equipment. May be required to work overtime and off-shift hours, including weekends, on a project or emergency basis.

**SPECIAL REQUIREMENTS**

There are no special requirements for this job.

**RIGHT TO WORK DOCUMENTATION**

Before being hired, all new employees will be required to show documentation as proof of authorization to work in the United States.

**Job Title:** Electrical/Instrumentation Supervisor

**Department:** Maintenance

**Reports To:** Treatment Plant Manager

**FLSA Status:** Non-Exempt

**Revised Date:** October, 2006